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FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS
for
ALASKA

U. S. DEPARTMENT of AGRICULTURE , SOIL CONSERVATION SERVICE
and
ALASKA SOIL CONSERVATION DISTRICT

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Army Corps of Engineers, Alaska Power Administration, U.S. Geological Survey, Alaska Highway Dept., Alaska Department of Fish and Game, University of Alaska, Greater Anchorage Area Borough and others.

AS OF
MAR. 1, 1969

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80521
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



SNOW SURVEYS
for
ALASKA

Report Prepared by
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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P.O. BOX F, PALMER, ALASKA

MARCH 1969

Snow cover throughout most of Alaska is considerably below the average for March 1. Heavy snowfall was received in late February in portions of the Chugach Mountains and in S.E. Alaska bringing the snowpack in these regions to near normal. Other areas in the state where snow surveys are conducted, range from 60% to 75% of normal.

The winter, so far, has been characterized by long periods of very low temperatures and light amounts of snowfall. Most of the snow cover in the interior portion of the state was received during the early winter months and now consists largely of depth hoar crystals.

Late summer and fall precipitation was deficient over much of Alaska. Generally soils are extremely dry and it is expected that much of the spring snow melt will be absorbed. Runoff into the river systems of interior Alaska will be light unless substantial amounts of snow are added during the next two months.

YUKON above RAMPART

Snow cover in the Upper Yukon basin is generally near 65% of average but only 50% of last year. Some snow courses such as Arctic Village, on the East Fork of the Chandalar river and Log Cabin, at the head of the Yukon drainage in Canada, have a near normal snowpack. The 40-Mile river country and the Yukon flats have the lightest snow water equivalent measured during the period of record.

TANANA-CHENA Drainage

Snow in the Alaska Range is much less than has been recorded in the past several years, as indicated by Fielding Lake and Mentasta Pass snow courses. The Chena basin also has considerably below normal snow cover and soils in this region are generally dry. The Chena and upper Tanana drainages have a snow cover of approximately 66% of average and 49% of last year on March 1.

MATANUSKA-SUSITNA-COPPER

The portion of the Alaska range draining into the Copper River has a very light snow cover. Most of the Susitna and Matanuska drainage also have a very deficient snowpack. Snow water equivalent, measured on several courses in this large area, is approximately 55% of last year and 65% of average for the period of record.

KUSKOKWIM

Although snow course records are very short in this region it is apparent that snow cover is considerably lighter than normal. Soils are considered dry and unless substantial snowfall is received in March and April, spring runoff will be light.

KOYUKUK

The Koyukuk drainage area has much less snow cover than last year at this time. Snow course measurements have not been taken long enough in this area to establish the normal condition but snow depths and water equivalents are considered as less than average.

COASTAL DRAINAGE

Late February storms added substantially to the snow pack in the coastal drainage near Anchorage. Snow cover, however, is still below the normal for March 1.

SNETTISHAM Drainage

Snow course measurements have been made in the Snettisham Watershed of S.E. Alaska since 1965 and snow pack has varied greatly from year to year. Measurements taken on March 1 are approximately average for the short period of record.

GLACIER Stations

The U.S. Geological Survey has established permanent index snow stations at different elevations on Gulkana, Wolverine, and Eagle Glaciers. Measurements of snow depth and water equivalent taken at these sites by U.S.G.S. glaciologists will be reported in this and future cooperative Snow-survey bulletins.

ALASKA SNOW SURVEYS

DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		PREVIOUS YEARS OF RECORD
					LAST YEAR	AVERAGE *	
YUKON Drainage:							
Chandalar Lake	3	3/3/69	17	2.4	5.6	3.6	3
Squaw Lake	4	3/3/69A	18	2.5E	5.5	4.0	2
Venetie	5	3/3/69	12	1.8	3.1	2.8	4
Arctic Village	6	3/4/69	20	3.1	4.2	3.1	5
Koness Lake	7	3/4/69	19	2.9	3.5	3.2	2
Coleen River	8	3/4/69A	16	2.5E	3.2	2.8	4
Vundik Lake	9	3/4/69	11	1.5	--	--	1
Fort Yukon	10	3/4/69	12	1.7	3.1	3.1	4
Black River	11	3/4/69	15	2.4	5.4	3.4	3
Circle City	12	3/5/69	15	2.1	4.7	3.8	4
Bull Lake	13	3/5/69A	16	2.6E	5.4	4.8	2
Dempsey Creek	84	3/5/69A	16	2.6E	--	--	--
Eagle Village	14	3/5/69	12	1.9	5.8	4.6	4
Boundary	15	3/5/69A	16	2.4E	5.6	5.9	2
Chicken Airstrip	16	3/5/69	10	1.5	3.7	3.3	4
Log Cabin	69	3/3/69	40	9.8	4.9	11.6	8
TANANA-CHENA:							
Yak Pasture	17	1/31/69	20	3.0	--	--	--
		2/26/69	19	3.5	5.0	4.1	7
Cleary Summit	18	1/17/69A	17	3.1E	5.0	--	1
	18	1/29/69	21	3.7	6.0	--	1
		2/14/69A	21	3.8E	--	--	--
	18	2/26/69	21	4.2	6.6	5.0	8
Little Chena	19	1/17/69	12	2.0E	--	--	--
		1/29/69	--	--	6.0	--	1
		2/14/69A	18	3.2	--	--	--
		3/3/69	19	3.7	6.0	4.5	4
Mt. Ryan	20	1/17/69A	14	2.4E	4.3	--	1
		1/29/69	--	--	7.2	--	1
		2/14/69A	15	2.7E	--	--	--
		3/3/69	18	3.3	7.2	4.9	4
Chena Hot Springs	21	1/17/69A	19	3.2E	3.3	--	1
		1/29/69	17	2.9	4.6	--	1
		2/14/69A	19	3.2E	--	--	--
		3/3/69	17	2.7	4.9	3.5	5
Big Windy	22	1/17/69A	15	3.0E	4.2	--	1
		1/29/69	17	3.8	4.6	--	1
		2/14/69A	14	3.4E	--	--	--
		3/3/69	16	4.5	4.6	2.2	4
Munson Ridge	23	1/17/69A	22	3.7E	6.4	--	1
		1/29/69	24	4.9	10.7	--	1
		2/14/69	25	5.0E	--	--	--
		3/3/69	25	5.4	13.5	9.8	5
French Creek	24	1/30/69	25	4.6	7.1	--	1
		2/26/69	24	4.9	7.5	6.2	6
Little Salcha	25	1/30/69	22	3.6	6.7	--	1
		2/26/69	23	4.6	7.1	5.5	6

(*) Average for Period of Record

ALASKA SNOW SURVEYS

DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		PREVIOUS YEARS OF RECORD
					LAST YEAR	AVERAGE *	
TANANA-CHENA:							
(continued):							
Wolf Creek	76	1/17/69A	4	0.8E	7.6	--	1
		1/29/69A	4	0.8E	6.0	--	1
		2/14/69A	6	1.4E	--	--	--
		3/3/69A	6	1.4E	7.0	--	1
Upper Chena	75	1/17/69A	18	3.1	6.5	--	1
		1/29/69	18	3.6	9.3	--	1
		2/14/69A	18	3.4E	--	--	--
		3/3/69	18	3.3	9.2	--	1
Colorado Creek	27	1/29/69	21	3.2	5.2	4.6	3
		3/3/69	20	4.0	5.2	5.2	3
Caribou Mine	28	1/17/69A	18	3.1E	3.4	--	1
		1/29/69	22	3.5	5.7	--	1
		2/14/69	22	3.5E	--	--	--
		3/3/69	22	4.0	4.8	4.1	3
Big Delta	29	1/30/69	15	2.2	--	--	--
		2/26/69	15	2.5	3.5	2.9	8
Tok Junction	30	2/28/69	14	2.0	4.5	3.5	8
Mentasta Pass	31	2/27/69	13	2.0	6.7	4.6	6
Fielding Lake	33	2/27/69	17	2.2	12.7	8.8	7
Fort Greely	78	11/14/68	7	.9	.8	1.4	2
		12/17/68	11	1.4	1.6	2.4	2
		1/31/69	15	2.1	2.9	3.5	2
		2/27/69	14	2.4	3.6	4.2	2
Meadows Road	79	11/14/68	7	.8	.6	1.0	2
		12/16/68	11	1.6	1.3	1.8	2
		1/31/69	15	2.0	1.9	2.7	2
		2/27/69	14	2.2	2.6	3.4	2
Donnelly Dome	80	11/14/68	12	1.9	1.4	2.4	2
		12/17/68	17	2.7	2.8	3.6	2
		1/30/69	21	3.4	5.1	6.2	2
		2/27/69	20	3.6	5.9	8.2	2
Granite Creek	81	11/14/68	8	1.0	.9	--	--
		12/16/68	11	1.6	1.4	--	--
		1/30/69	14	2.0	3.0	--	1
		2/26/69	14	2.3	3.6	--	1
Bonanza Creek	82	3/6/69	22	3.7	5.8	--	1
Wien Lake	74	3/2/69	17	2.8	4.0	--	1
COPPER RIVER Drainage:							
Mankomen Lake	32	2/1/69	12	1.6	5.6	4.3	2
		3/1/69	11	1.5	7.6	6.1	2
Haggard Creek	34	2/2/69A	13	1.7E	5.0	5.2	3
		2/27/69	12	1.6	6.0	4.5	4
Sanford River	37	2/2/69A	15	2.4E	4.2	3.7	2
		2/28/69A	14	2.5E	5.0	4.6	2
St. Anne's Lake	54	1/31/69	17	2.6	4.9	3.5	4
		2/28/69	19	3.5	6.4	4.8	4
Little Nelchina	40	1/31/69A	15	2.6E	2.8	--	1
		2/28/69A	20	3.2E	4.4	--	1

A - Aerial marker reading

(*) Average for Period of Record

E - Estimated

ALASKA SNOW SURVEYS

DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		PREVIOUS YEARS OF RECORD
					LAST YEAR	AVERAGE *	
MATANUSKA-SUSITNA:							
Monahan Flat	35	2/2/69A	18	2.7E	6.6	5.2	3
		2/27/69	22	3.6	8.2	6.3	4
Clearwater Lake	36	2/2/69	15	2.1	4.0	3.8	3
		2/27/69	16	2.3	4.4	4.6	3
Fog Lakes	38	2/2/69	9	1.2	5.5	2.6	4
		2/27/69	10	1.2	5.6	3.1	4
Oshetna Lake	39	1/31/69	13	2.1	2.4	2.8	3
		2/23/69	17	2.4	3.0	2.9	5
Lake Louise	41	1/31/69	16	2.1	3.2	3.3	3
		2/28/69	16	2.4	4.3	3.9	4
Chelatna Lake	44	2/2/69A	21	3.4E	8.2	7.3	4
		3/2/69A	37	6.6E	9.0	9.0	5
Peters Hills	45	2/2/69A	30	4.8E	11.0	--	1
		3/2/69	42	7.6E	16.5	--	1
Talkeetna	46	2/2/69	16	2.2	8.4	6.5	2
		2/27/69	26	3.5	10.6	8.1	2
Bald Mtn.Lake	47	2/2/69A	13	1.8E	--	2.5	3
		2/27/69	24	3.6	11.7	6.5	4
Skwentna	48	2/2/69	28	5.2	8.5	7.4	2
		2/27/69	35	6.3	11.3	9.2	2
Alexander Lake	49	2/2/69	23	3.8	8.3	7.9	4
		2/27/69	30	5.1	10.5	10.2	5
Willow Airstrip	50	2/2/69	16	2.2	3.1	5.6	4
		2/28/69	23	3.6	4.8	6.2	5
Independence Mine	51	3/3/69	39	7.1	--	12.5	3
Sheep Mountain	53	2/28/69	19	3.4	3.9	3.5	4
KUSKOKWIM Drainage:							
Lake Minchumina	42	3/2/69	18	3.3	4.2	4.7	2
Farewell Lake	43	3/2/69	16	2.9	3.6	4.2	2
KOYUKUK Drainage:							
Anaktuvuk Pass	1	3/3/69	16	2.6	4.0	3.4	2
Bettles Field	2	3/2/69	25	4.5	11.9	8.9	2
Lake Todatonten	77	3/6/69A	19	3.2E	8.2	--	1
COASTAL Drainage:							
McArthur	52	1/31/69A	51	11.2E	19.5	12.4	4
		No measurement.	--	--	21.4	19.2	5
Worthington Glac.	55	2/28/69	36	9.1	--	11.5	3
Moraine	56	No measurement.	--	--	6.3	6.0	2
Ptarmigan	57	No measurement.	--	--	7.1	7.3	2
Marmot	58	No measurement.	--	--	13.1	14.5	2
Goat	59	No measurement.	--	--	9.7	7.8	2
Grizzly	60	No measurement.	--	--	21.0	16.1	2
Arctic Valley #1	61	1/29/69	17	3.1	1.6	3.1	3
		2/26/69	23	4.4	T	3.5	4
Arctic Valley #2	62	1/29/69	16	3.2	1.0	2.8	3
		2/26/69	21	4.1	T	2.6	5

A - Aerial marker reading

E - Estimated

(*) Average for Period of Record

ALASKA SNOW SURVEYS

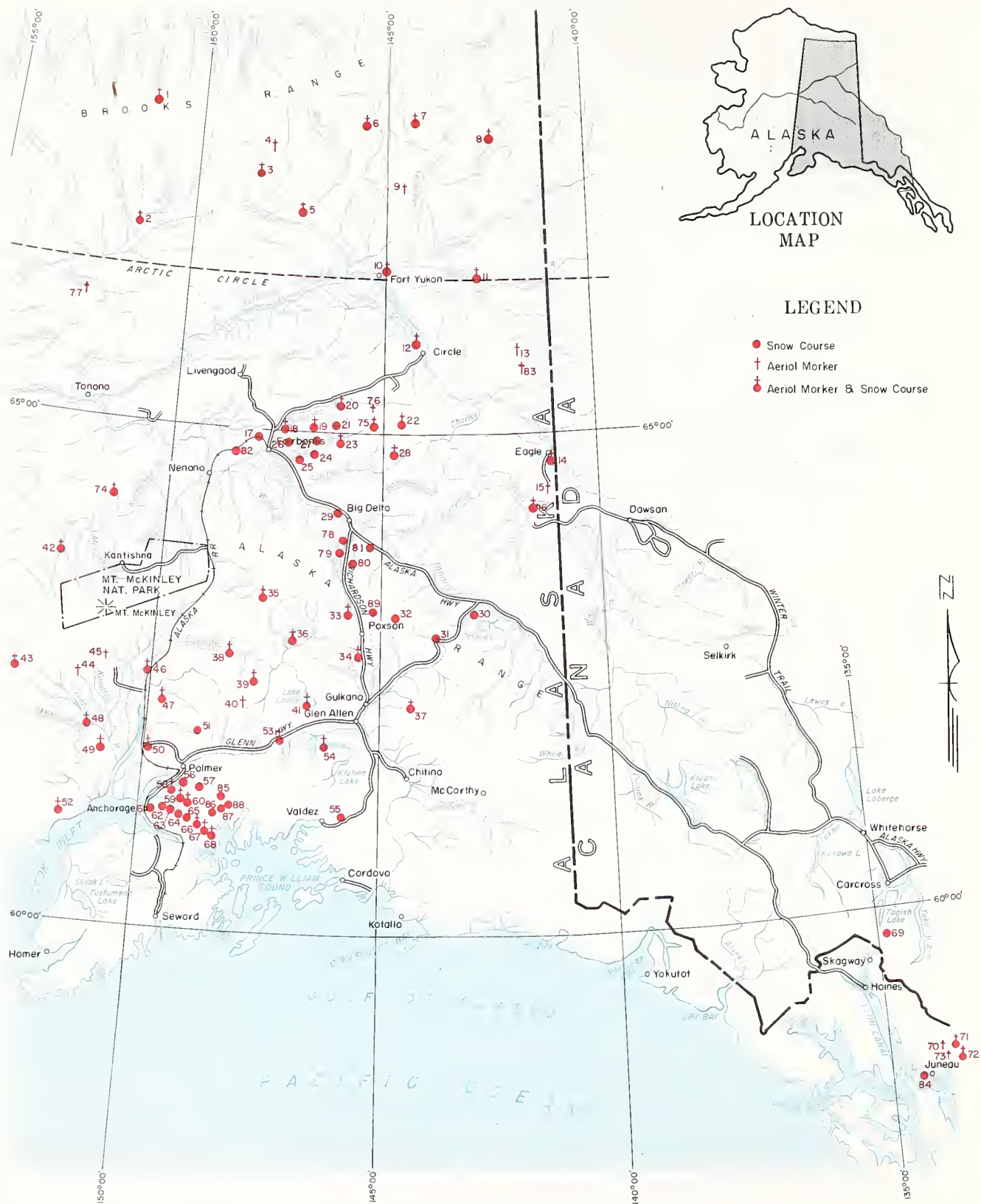
DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		PREVIOUS YEARS OF RECORD
					LAST YEAR	AVERAGE *	
COASTAL Drainage: (continued)							
Arctic Valley #3	63	1/29/69	17	2.9	5.5	2.0	3
		2/26/69	27	5.0	5.4	5.0	5
Arctic Valley #4	64	1/29/69	18	3.6	6.7	5.3	3
		2/26/69	26	4.2	7.2	5.7	5
Arctic Ski Bowl	65	1/29/69	22	5.1	10.9	10.1	3
		2/26/69	32	8.4	14.0	11.2	5
Bird Creek	66	2/3/69	29	6.8	14.3	11.8	2
		2/23/69	46	10.5	17.2	14.5	2
Ship Creek	67	2/3/69	27	5.4	9.4	7.4	2
		2/28/69	36	7.4	10.6	8.9	2
Indian Pass	68	2/3/69	35	9.1	16.9	14.2	2
SOUTHEAST ALASKA:							
Upper Long Lake	70	6/6/68	12	5.0	--	26.2	2
		1/17/69	78	30.0	--	--	--
		2/28/69	97	30.7	16.7	32.5	4
Long Lake	71	6/6/68	9	4.0	--	28.9	2
		1/17/69	90	28.2	--	--	--
		2/28/69	104	35.6	21.6	38.7	4
Speel River	72	6/6/68	0	0	--	12.1	2
		1/17/69	64	18.1	--	--	--
		2/28/69	77	24.4	17.0	30.0	4
Crater Lake	73	6/6/68A	48	24.0E	--	53.4	2
		1/17/69	154	63.0	--	--	--
		2/28/69	163	69.0	--	--	--
Douglas Ski Bowl	84	6/3/68	33	15.4	--	--	--
		3/4/69	79	25.4	19.7	--	1
GLACIER STATIONS:							
Wolverine Glacier							
No. 1 2100'	86	4/6/68	80	31.5			
		6/7/68	25	14.2			
		10/6/68	1	.2			
		1/28/69	30	10.6			
No. 2 3610'	87	3/3/68	119	46.9			
		4/8/68	128	51.2			
		6/5/68	102	58.3			
		7/20/68	34	26.8			
		10/6/68	20	5.5			
		1/27/69	70	27.5			
No. 3 4430'	88	6/6/68	184	95.7			
		7/19/68	118	66.1			
		8/22/68	48	25.6			
		9/15/68	41	21.3			
		Begin new snowpack					
		10/10/68	36	11.8			
		1/26/69	93	37.8			

(*) Average for Period of Record

ALASKA SNOW SURVEYS

DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		PREVIOUS YEARS OF RECORD
					LAST YEAR	AVERAGE *	
GLACIER STATIONS: (continued) Gulkana Glacier No. 1 4790' No. 2 5478' No. 3 6363'	89	4/30/68	83	30.7			
		6/16/68	27	17.3			
		9/14/68	T	T			
		12/6/68	20	5.9			
		12/13/68	21	6.3			
		4/29/68	118	42.9			
		6/16/68	96	44.9			
		7/13/68	37	17.7			
		9/5/68	3	.8			
		9/14/68	6	2.0			
		12/6/68	33	10.6			
		5/2/68	197	80.7			
		6/15/68	181	94.5			
		7/14/68	140	74.8			
		8/8/68	102	59.4			
		8/26/68	88	44.5			
		Begin new snowpack					
		9/7/68	9	2.4			
		12/5/68	50	16.1			

(*) Average for Period of Record



INDEX OF ALASKA SNOW COURSES

MAP NO.	COURSE NAME	COURSE NO.	ELEV.	MAP NO.	COURSE NAME	COURSE NO.	ELEV.
1	Anaktuvuk Pass	51TT1A	2100	46	Talkeetna	50NN2	350
2	Bettles Field	51RR1A	640	47	Bald Mt. Lake	49NN1A	2150
3	Chandalar Lake	48SS1A	2040	48	Skwentna	51MM1A	158
4	Squaw Lake	48SS2a	2150	49	Alexander Lake	50MM1A	200
5	Venetie	46SS1A	610	50	Willow Airstrip	59MM2	150
6	Arctic Village	45TT1A	2300	51	Independence Mine	49MM7	3300
7	Koness Lake	44SS1A	1790	52	McArthur	51LL1A	120
8	Coleen River	42SS1A	1100	53	Sheep Mountain	45MM1	2700
9	Vundik Lake	43SS1a	950	54	St. Anne's Lake	46MM1A	1985
10	Fort Yukon	44RR1AM	425	55	Worthington Glacier	45MM2	2400
11	Black River	42RR1A	650	56	Moraine	48MM1	2100
12	Circle City	44QQ3A	600	57	Ptarmigan	48MM2	3000
13	Bull Lake	42QQ1a	810	58	Marmot	48MM8A	2000
14	Eagle Village	41PP1A	900	59	Goat	48MM7A	3200
15	Boundary	41PP3A	3300	60	Grizzly	48MM4A	5000
16	Chicken Airstrip	41PP2A	1650	61	Arctic Valley #1	49MM1	500
17	Yak Pasture	47PP1	540	62	Arctic Valley #2	49MM2	1000
18	Cleary Summit	47QQ1A	2230	63	Arctic Valley #3	49MM3	2030
19	Little Chena	46QQ2AP	2200	64	Arctic Valley #4	49MM4	2330
20	Mt. Ryan	46QQ1AP	2950	65	Arctic Ski Bowl	49MM5	3000
21	Chena Hot Springs	46QQ3	1250	66	Bird Creek	49MM6A	2350
22	Big Windy	44QQ2AP	3850	67	Ship Creek	49MM7AM	1750
23	Munson Ridge	46PP1AP	3100	68	Indian Pass	49MM8A	2350
24	French Creek	46PP2MP	2010	69	Log Cabin (B.C.)	35KK1	2880
25	Little Salcha	46PP3	1500	70	Upper Long Lake	33JJ2a	1000
26	Glenn Creek	47PP2	925	71	Long Lake	33JJ1A	1075
27	Colorado Creek	46PP4	750	72	Speel River	33JJ3A	275
28	Caribou Mine	45PP2A	1115	73	Crater Lake	33JJ4a	1750
29	Big Delta	45PP1	975	74	Wien Lake	55PP1A	1020
30	Tok Junction	43OO1	1650	75	Upper Chena	44QQ3AP	3000
31	Mentasta Pass	43NN1	2430	76	Wolf Creek	44QQ4a	3850
32	Mankomen Lake	44NN1	3050	77	Lake Todatonten	52RR1a	985
33	Fielding Lake	45OO1A	3000	78	Ft. Greely	45001	1420
34	Haggard Creek	45NN1A	2540	79	Meadows Road	45002	1570
35	Monahan Flat	47OO1A	2710	80	Donnelly Dome	45003	2200
36	Clearwater Lake	46NN1A	3100	81	Granite Creek	45004	1235
37	Sanford River	44NN2a	2280	82	Bonanza Creek	48PP1	1150
38	Fog Lakes	48NN1A	2270	83	Dempsey Creek	42QQ2a	950
39	Oshetna Lake	47NN1A	2950	84	Douglas Ski Bowl	34II1	1640
40	Little Nelchina	47NN2a	4160	85	Eagle Glacier	49MM9	4790
41	Lake Louise	46NN2A	2400	86	Wolverine Glacier #1	48LL1	2130
42	Lake Minchumina	52OO1A	730	87	Wolverine Glacier #2	48LL2	3610
43	Farewell Lake	53NN1A	1090	88	Wolverine Glacier #3	48LL3	4430
44	Chelatna Lake	51NN1a	1650	89	Gulkana Glacier	45OO2	5500
45	Peters Hills	50NN1a	2010				

Legend

45TT1 Snow Course Only
 45TT1M Snow Course & Soil Moisture
 45TT1A Snow Course & Aerial Marker
 45TT1a Aerial Marker Only
 45TT1P Snow Course & Precipitation Gage

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P.O. BOX F, PALMER, ALASKA

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